

572

FILE 'HOME' ENTERED AT 18:11:08 ON 09 SEP 2004

L3 633 (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE
OR CONJUGAT! OR LYSINE OR D-ALA! OR MALAMID! OR ALBUMIN)
L4 745 (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE
OR CONJUGAT! OR LYSINE OR D-ALA! OR MALEIMID! OR ALBUMIN)
L5 677 (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE
OR CONJUGAT! OR ALBUMIN)
L9 425 L4 AND DERIVATIVE (S) (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A)
LIKE)

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(FILE 'HOME' ENTERED AT 18:11:08 ON 09 SEP 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE,
AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS,
BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,
CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 18:11:23 ON 09 SEP 2004

L1 SEA (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)
QUE (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)

368 FILE ADISCTI
41 FILE ADISINSIGHT
31 FILE ADISNEWS
110 FILE AGRICOLA
8 FILE ANABSTR
1 FILE ANTE
69 FILE AQUASCI
34 FILE BIOBUSINESS
26 FILE BIOCOMMERCE
23 FILE BIOENG
3353 FILE BIOSIS
126 FILE BIOTECHABS
126 FILE BIOTECHDS
807 FILE BIOTECHNO
424 FILE CABA
233 FILE CANCERLIT
2904 FILE CAPLUS
21 FILE CEABA-VTB
1 FILE CEN
68 FILE CIN
51 FILE CONFSCI
1 FILE CROPB
7 FILE CROPU
101 FILE DISSABS
49 FILE DDFB
590 FILE DDFU
4838 FILE DGENE
49 FILE DRUGB
68 FILE IMSDRUGNEWS
625 FILE DRUGU
50 FILE EMBAL
2509 FILE EMBASE
1298 FILE ESBIODASE
71 FILE FEDRIP
35 FILE FROSTI

10 FILE FSTA
 234 FILE GENBANK
 1 FILE HEALSAFE
 450 FILE IFIPAT
 143 FILE JICST-EPLUS
 360 FILE LIFESCI
 2 FILE MEDICONF
 2356 FILE MEDLINE
 2 FILE NIOSHTIC
 3 FILE NTIS
 13 FILE OCEAN
 1133 FILE PASCAL
 781 FILE PCTGEN
 39 FILE PHAR
 34 FILE PHARMAML
 1 FILE PHIC
 96 FILE PHIN
 220 FILE PROMT
 73 FILE PROUSDDR
 1 FILE RDISCLOSURE
 3186 FILE SCISEARCH
 1 FILE SYNTHLINE
 710 FILE TOXCENTER
 1243 FILE USPATFULL
 118 FILE USPAT2
 1 FILE VETB
 450 FILE WPIDS
 4 FILE WPIFV
 450 FILE WPINDEX
 24 FILE BABS
 74 FILE CBNB
 1 FILE DIOGENES
 854 FILE INVESTEXT
 38 FILE IPA
 3 FILE NAPRALERT
 1 FILE USAN
 L1 QUE (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, BIOTECHNO' ENTERED AT
 18:14:52 ON 09 SEP 2004

L2 15115 S L1
 L3 633 S (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE
 L4 745 S (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE
 L5 677 S (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE) (P) (DERIVATIVE
 L6 163 S L5 AND ((BLOOD OR SERUM) (3N) PROTEIN) OR ALBUMIN)
 L7 73 DUP REM L6 (90 DUPLICATES REMOVED)
 L8 32 S L7 NOT PY>2000
 L9 425 S L4 AND DERIVATIVE (S) (GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A
 L10 19 S L9 AND (LYSINE OR D-ALA!))
 L11 14 DUP REM L10 (5 DUPLICATES REMOVED)

L8 ANSWER 1 OF 32 MEDLINE on STN
AN 2000256912 MEDLINE
DN PubMed ID: 10794683
TI Potent **derivatives** of **glucagon-like**
peptide-1 with pharmacokinetic properties suitable for once daily
administration.
AU Knudsen L B; Nielsen P F; Huusfeldt P O; Johansen N L; Madsen K; Pedersen
F Z; Thogersen H; Wilken M; Agerso H
CS Department of Molecular Pharmacology, Health Care Discovery and
Preclinical Development, Novo Nordisk A/S, Novo Park, DK-2760 Maaloev,
Denmark.. lbkn@novo.dk
SO Journal of medicinal chemistry, (2000 May 4) 43 (9) 1664-9.
Journal code: 9716531. ISSN: 0022-2623.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200006
ED Entered STN: 20000706
Last Updated on STN: 20000706
Entered Medline: 20000629
AB A series of very potent **derivatives** of the 30-amino acid peptide
hormone **glucagon-like** peptide-1 (**GLP**-
1) is described. The compounds were all derivatized with fatty
acids in order to protract their action by facilitating binding to serum
albumin. **GLP-1** had a potency (EC(50)) of 55
pM for the cloned human **GLP-1** receptor. Many of the
compounds had similar or even higher potencies, despite quite large
substituents. All compounds derivatized with fatty acids equal to or
longer than 12 carbon atoms were very protracted compared to **GLP**
-1 and thus seem suitable for once daily administration to type
2 diabetic patients. A structure-activity relationship was obtained.
GLP-1 could be derivatized with linear fatty acids up to
the length of 16 carbon atoms, sometimes longer, almost anywhere in the
C-terminal part without considerable loss of potency. Derivatization with
two fatty acid substituents led to a considerable loss of potency. A
structure-activity relationship on derivatization of specific amino acids
generally was obtained. It was found that the longer the fatty acid, the
more potency was lost. Simultaneous modification of the N-terminus (in
order to obtain better metabolic stability) interfered with fatty acid
derivatization and led to loss of potency.

L8 ANSWER 28 OF 32 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN
AN 95:323719 SCISEARCH
GA The Genuine Article (R) Number: QW584
TI PHYSIOLOGICAL AUGMENTATION OF AMINO ACID-INDUCED INSULIN-SECRETION BY GIP
AND GLP-I BUT NOT BY CCK-8
AU FIESELER P; BRIDENBAUGH S; NUSTEDE R; MARTELL J; ORSKOV C; HOLST J J;
NAUCK M A (Reprint)
CS RUHR UNIV BOCHUM, KNAPPSCHAFTS KRANKENHAUS, DEPT MED, SCHORNAU 23-25,
D-44892 BOCHUM, GERMANY (Reprint); UNIV GOTTINGEN, DEPT SURG, DEPT MED,
DIV GASTROENTEROL & ENDOCRINOL, D-37075 GOTTINGEN, GERMANY; UNIV
COPENHAGEN, PANUM INST, DEPT MED ANAT, DK-2200 COPENHAGEN, DENMARK; UNIV
COPENHAGEN, PANUM INST, DEPT PHYSIOL, DK-2200 COPENHAGEN, DENMARK
CYA GERMANY; DENMARK
SO AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM, (MAY 1995)
Vol. 31, No. 5, pp. E949-E955.
ISSN: 0193-1849.

DT Article; Journal
FS LIFE
LA ENGLISH

REC Reference Count: 34

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB It was the aim of this study to test insulinotropic actions of cholecystokinin octapeptide (CCK-8), gastric inhibitory polypeptide (GIP), and **glucagon-like** peptide I (GLP-I)-(7-36) amide at basal glucose but physiologically elevated amino acid concentrations. Therefore, in nine fasting healthy volunteers, an amino acid mixture was infused intravenously (12.6 g/h over 120 min). On separate occasions, from 30 to 120 min, placebo (0.9% NaCl-1% human serum **albumin**), synthetic sulfated CCK-8 (0.5 pmol . kg(-1). min(-1)), human GIP (1 pmol . kg(-1). min(-1)), or GLP-I-(7-36) amide (0.3 pmol . kg(-1). min(-1)) was infused intravenously to mimic physiological increments after a meal. The amino acid infusion lead to a small increment in plasma glucose from 4.8 +/- 0.2 to 5.0 +/- 0.2 mmol/l and significantly elevated insulin and C-peptide concentrations. GIP and GLP-I-(7-36) amide further stimulated insulin (1.8-fold, P = 0.0001 and 0.004, respectively) and C-peptide (1.3-fold, P = 0.0003 and 0.013, respectively), with a subsequent slight reduction in plasma glucose (P < 0.0001). Insulin and C-peptide then decreased again in parallel. CCK-8 was without effect on insulin and C-peptide levels. In conclusion, GIP and GLP-I-(7-36) amide are not only able to interact with elevated plasma glucose but are insulinotropic also with physiologically raised amino acid concentrations. Such an interaction could play a role after the ingestion of mixed meals. Cholecystokinin, on the other hand, is not a physiological incretin also under these conditions.

L8 ANSWER 29 OF 32 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN
AN 1999:29454457 BIOTECHNO
TI New developments in the treatment of type 1 diabetes mellitus
AU Haak T.

CS Dr. T. Haak, Diabetes-Schulungszentrum, Medizinische Klinik I, Klin.
Johann Wolfgang Goethe-Univ., Theodor-Stern-Kai 7, D-60590 Frankfurt am
Main, Germany.

E-mail: DSZ-Haak@em.uni-frankfurt.de

SO Experimental and Clinical Endocrinology and Diabetes, (1999), 107/SUPPL.
3 (S108-S113), 38 reference(s)
CODEN: ECEDFQ ISSN: 0947-7349

DT Journal; Conference Article
CY Germany, Federal Republic of

LA English
SL English

AB Treatment of type 1 diabetes mellitus has made tremendous advances within the last decades. With concern to insulin delivery there are two promising new approaches. One is the intrapulmonary insulin delivery which has become feasible by the development of new inhalation devices which provide a sufficient degree of intrapulmonary drug retention. Also oral insulin delivery seems feasible when surface active substances are used to cross the mucosal membrane in the gut. Clinical research has also focussed on coatings for the insulin molecules to solve the problem raised by the proteolytic activity of the digestive system. A very new agent produced by a fungus called Pseudomassaria has been demonstrated to reverse the clinical signs of diabetes mellitus in mice. The compound diffuses through the cell membrane, binds to the inner part of the insulin receptor and activates the insulin typical biological effects. Nowadays a variety of insulin analogs are designed and tested for their clinical use. By shifting the isoelectric point towards to a slightly acidic pH, HOE 901 precipitates at physiologic pH resulting in a constant and peakless insulin delivery. NN 304 is a 14-carbon aliphatic fatty acid

acylated analog that binds to serum **albumin** resulting in a flatter time-action profile than NPH insulin. Also rapid acting insulin analogs are or will be launched in the near future aiming to ensure an improved postprandial glucose regulation. **Glucagon-like peptide-1 (GLP-1)** improves metabolic control by a variety of effects, e. g. the enhancement of insulin secretion and inhibition of glucagon secretion. Moreover, **GLP-1** reduces food and water intake controlled by the brain, and inhibits gastric emptying. A disadvantage of **GLP-1** is its very short half-life. Novel **derivatives** with the beneficial effects of **GLP-1** but a better resistance against degradation have been designed. In addition substances have been developed inhibiting **GLP-1** degradation or augmenting **GLP-1** release from its abundant endogenous pool. Finally, there is a variety of interesting approaches aiming to improve or ease blood glucose self-monitoring. One is the development of subcutaneous catheters for continuous blood glucose control. In another system reverse iontophoresis is used for sampling interstitial fluid which reflects capillary blood glucose levels. Instead of using an electric current, a brandnew system creates micropores in the skin by a laser ablation system. Through these micropores a specific device performs a mild suction to obtain interstitial fluid. Further systems which measure blood glucose by near infrared spectroscopy are still investigated in order to improve their technical function and to reduce their weight. This article intends to give an overview over the new developments in the treatment and management of type-1-diabetes mellitus.

(GLP-1 OR GLUCAGON-LIKE OR GLUCAGON (A) LIKE)

L11 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 2004:626165 CAPLUS
TI Identification of CJC-1131-**albumin** bioconjugate as a stable and
bioactive **GLP-1**(7-36) analog
AU Leger, Roger; Thibaudeau, Karen; Robitaille, Martin; Quraishi, Omar; van
Wyk, Pieter; Bousquet-Gagnon, Nathalie; Carette, Julie; Castaigne,
Jean-Paul; Bridon, Dominique P.
CS Research Department, ConjuChem Inc., Montreal, QC, H2X 3Y8, Can.
SO Bioorganic & Medicinal Chemistry Letters (2004), 14(17), 4395-4398
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier B.V.
DT Journal
LA English
AB A series of analogs of **GLP-1**(7-36) amide containing a
N ϵ -(2-{2-[2-(3-maleimidopropylamido)ethoxy]ethoxy}acetyl)
lysine has been synthesized and the resulting **derivs.**
were bioconjugated to Cys34 of human serum **albumin** (HSA). The
GLP-1-HSA bioconjugates were analyzed in vitro to assess
the stabilizing effect of bioconjugation in the presence of DPP-IV as well
as **GLP-1** receptor binding and activation. Compound 9
(CJC-1131) having the point of attachment to **albumin** at the
C-terminal of **GLP-1** and a D-alanine substitution at
position 8 was identified as having the best combination of stability and
bioactivity.
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 14 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
AN 2002392634 EMBASE
TI NN2211: A long-acting **glucagon-like** peptide-1
derivative with anti-diabetic effects in glucose-intolerant pigs.
AU Ribel U.; Larsen M.O.; Rolin B.; Carr R.D.; Wilken M.; Sturis J.;
Westergaard L.; Deacon C.F.; Knudsen L.B.
CS U. Ribel, Pharmacological Research 1, Health Care Pharmacology, Novo
Nordisk A/S, Novo Alle, DK-2880 Bagsvaerd, Denmark. ulr@novonordisk.com
SO European Journal of Pharmacology, (13 Sep 2002) 451/2 (217-225).
Refs: 43
ISSN: 0014-2999 CODEN: EJPHAZ
PUI S 0014-2999(02)02189-1
CY Netherlands
DT Journal; Article
FS 003 Endocrinology
030 Pharmacology
037 Drug Literature Index
LA English
SL English
AB **Glucagon-like** peptide-1 (**GLP-1**) is
an effective anti-diabetic agent, but its metabolic instability makes it
therapeutically unsuitable. This study investigated the pharmacodynamics
of a long-acting **GLP-1 derivative** (NN2211:
(Arg(34)Lys(26)-(N ϵ -(γ -Glu(N α - hexadecanoyl))) -
GLP-1(7-37))), after acute and chronic treatment in
hyperglycaemic minipigs. During hyperglycaemic glucose clamps, NN2211 (2
 μ g kg⁻¹) i.v.) treated pigs required more (P<0.005) glucose than
control animals (5.8 \pm 2.1 vs. 2.9 \pm 1.8 mg kg⁻¹ min⁻¹). Insulin
excursions were higher (P<0.01) after NN2211 (15367 \pm 5438 vs.
9014 \pm 2952 pmol l⁻¹ min), and glucagon levels were suppressed

($P < 0.05$). Once-daily injections of NN2211 ($3.3 \mu\text{g kg}^{-1}$ s.c.) reduced the glucose excursion during an oral glucose tolerance test, to $59 \pm 15\%$ of pre-treatment values by 4 weeks ($P < 0.05$), without measurable changes in insulin responses. Fructosamine concentrations were unaltered by vehicle, but decreased (from 366 ± 187 to $302 \pm 114 \mu\text{mol l}^{-1}$, $P = 0.14$) after 4 weeks of NN2211. Gastric emptying was reduced ($P < 0.05$) by NN2211. NN2211 acutely increases glucose utilization during a hyperglycaemic glucose clamp and chronic treatment results in better daily metabolic control. Therefore, NN2211, a **GLP-1 derivative** that can be administered once daily, holds promise as a new anti-diabetic drug with a minimal risk of hypoglycaemia. .COPYRGT. 2002 Elsevier Science B.V. All rights reserved.

L11 ANSWER 8 OF 14 MEDLINE on STN
AN 2000256912 MEDLINE
DN PubMed ID: 10794683
TI Potent **derivatives** of **glucagon-like** peptide-1 with pharmacokinetic properties suitable for once daily administration.
AU Knudsen L B; Nielsen P F; Huusfeldt P O; Johansen N L; Madsen K; Pedersen F Z; Thogersen H; Wilken M; Agerso H
CS Department of Molecular Pharmacology, Health Care Discovery and Preclinical Development, Novo Nordisk A/S, Novo Park, DK-2760 Maaloev, Denmark.. lbkn@novo.dk
SO Journal of medicinal chemistry, (2000 May 4) 43 (9) 1664-9. Journal code: 9716531. ISSN: 0022-2623.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200006
ED Entered STN: 20000706
Last Updated on STN: 20000706
Entered Medline: 20000629
AB A series of very potent **derivatives** of the 30-amino acid peptide hormone **glucagon-like** peptide-1 (**GLP-1**) is described. The compounds were all derivatized with fatty acids in order to protract their action by facilitating binding to serum **albumin**. **GLP-1** had a potency (EC_{50}) of 55 pM for the cloned human **GLP-1** receptor. Many of the compounds had similar or even higher potencies, despite quite large substituents. All compounds derivatized with fatty acids equal to or longer than 12 carbon atoms were very protracted compared to **GLP-1** and thus seem suitable for once daily administration to type 2 diabetic patients. A structure-activity relationship was obtained. **GLP-1** could be derivatized with linear fatty acids up to the length of 16 carbon atoms, sometimes longer, almost anywhere in the C-terminal part without considerable loss of potency. Derivatization with two fatty acid substituents led to a considerable loss of potency. A structure-activity relationship on derivatization of specific amino acids generally was obtained. It was found that the longer the fatty acid, the more potency was lost. Simultaneous modification of the N-terminus (in order to obtain better metabolic stability) interfered with fatty acid derivatization and led to loss of potency.

L11 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:677200 CAPLUS
DN 135:50956
TI Oral delivery of glucagon-like peptide-1 in a modified polymer preparation normalizes basal glycemia in diabetic db/db mice

AU Joseph, J. W.; Kalitsky, J.; St-Pierre, S.; Brubaker, P. L.
 CS Department of Physiology, University of Toronto, Toronto, ON, Can.
 SO Diabetologia (2000), 43(10), 1319-1328
 CODEN: DBTGAI; ISSN: 0012-186X
 PB Springer-Verlag
 DT Journal
 LA English
 AB The insulinotropic hormone, **glucagon-like peptide-1** (**GLP-1**) has been proposed for the treatment of patients with Type II (non-insulin-dependent) diabetes mellitus. As **GLP-1** is rapidly cleaved at L-ala2 by dipeptidyl-peptidase IV, **D-ala2-GLP-1** was synthesized and shown to have dipeptidyl peptidase IV resistance in vitro and enhanced bioactivity in mice during an oral glucose challenge. The actions of **D-ala2-GLP-1** were, however, lost within 4 h of injection, thus necessitating frequent and invasive treatment if it is to be used therapeutically. To circumvent this problem, a microsphere of **D-ala2-GLP-1** that could be given orally was developed. We encapsulated **D-ala2-GLP-1** in poly(lactide-co-glycolide)-COOH with olive oil as a filler, using phase inversion. The microspheres were tested in vivo by oral gavage in mice at t = 0 h followed by repeated oral glucose tolerance tests at t = 0, 4 and 8 h. The **D-ala2-glucagon-like peptide-1-microspheres** lowered the glycemic response to the 4 h oral glucose challenge in both normal CD1 and diabetic db/db mice, by $41 \pm 12 \%$ ($p < 0.001$) and $27 \pm 5 \%$ ($p < 0.001$), resp. and by $19 \pm 11 \%$ ($p < 0.05$) and $28 \pm 4 \%$ ($p < 0.001$), resp. during the 8-h test. At 4 h after the oral gavage, basal glycemia in the diabetic mice was reduced from 13 ± 1 mmol/l to 10 ± 1 mmol/l and was reduced further 8 h after treatment from 12 ± 1 mmol/l to 8 ± 1 mmol/l ($p < 0.05$). Giving **D-ala2-GLP-1** alone orally had no effect on glycemia. The data presented here suggest that a similar microsphere preparation could be useful in the delivery of **GLP-1** to patients with Type II diabetes.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:613694 CAPLUS

DN 131:248241

TI Stabilized aqueous peptide solutions

IN Kaarsholm, Niels C.

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 12

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9947160	A1	19990923	WO 1999-DK115	19990308
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

AU 9926125	A1	19991011	AU 1999-26125	19990308
EP 1061947	A1	20001227	EP 1999-906095	19990308
EP 1061947	B1	20040616		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2003526599	T2	20030909	JP 2000-536399	19990308
AT 269103	E	20040715	AT 1999-906095	19990308
PRAI EP 1998-610006	A	19980313		
US 1998-78422P	P	19980318		
WO 1999-DK115	W	19990308		

AB Aqueous compns. comprising at least one peptide selected from glucagon, **GLP-1**, and analogs and **derivs.** thereof together with a stabilizing and solubilizing amount of at least one detergent, said detergent having at least 2 pos. charges, at least 2 neg. charges, or a combination of at least one pos. charge and at least one neg. charge.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:290631 CAPLUS

DN 124:307606

TI Glucagon-like insulintropic peptide analogs and their use in diabetes treatment

IN Chen, Victor John; Dimarchi, Richard D.; Kriauciunas, Aidas V.; Smiley, David L.; Stucky, Russell D.

PA Eli Lilly and Co., USA

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 708179	A2	19960424	EP 1995-307299	19951013
	EP 708179	A3	19960828		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	US 5512549	A	19960430	US 1994-324960	19941018
	NO 9504055	A	19960419	NO 1995-4055	19951012
	EP 1227151	A1	20020731	EP 2002-257	19951013
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV				
	ZA 9508723	A	19970416	ZA 1995-8723	19951016
	CA 2160753	AA	19960419	CA 1995-2160753	19951017
	FI 9504941	A	19960419	FI 1995-4941	19951017
	AU 9534322	A1	19960502	AU 1995-34322	19951017
	HU 73413	A2	19960729	HU 1995-3001	19951017
	CN 1129224	A	19960821	CN 1995-119955	19951017
	JP 08245696	A2	19960924	JP 1995-268363	19951017
	BR 9504452	A	19970520	BR 1995-4452	19951018
PRAI	US 1994-324960	A	19941018		
	EP 1995-307299	A3	19951013		

OS MARPAT 124:307606

AB **Glucagon-like** insulintropic peptide (**GLP-1**) (7-37) analogs and **derivs.** are disclosed. The analogs include amino acid substitutions, amino and carboxyl terminal modifications and C6-C10 acylations on the **lysine** ϵ -amino group. The claimed compds. stimulate the secretion or biosynthesis of insulin in poorly functioning beta cells and are therefore useful in treating Type II diabetics. **GLP-1** analogs were prepared and tested in dogs and rats, e.g. in hyperglycemic clamp

studies and in glucose tolerance tests. These analogs persisted in the serum for longer periods of time than **GLP-1**(7-37).

WEST Search History

DATE: Thursday, September 09, 2004

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L11	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (D-Ala\$8)	45
<input type="checkbox"/>	L10	L9 and (conjugat\$ or bind\$ or attach\$ or bond or bound) same ((blood or serum) adj protein or albumin)	7
<input type="checkbox"/>	L9	L8 not l4	71
<input type="checkbox"/>	L8	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (derivative or MPA or maleimid\$) with (conjug\$ or attach\$ or link\$ or bind\$)	82
<input type="checkbox"/>	L7	l4 not l6	19
<input type="checkbox"/>	L6	l4 and L5	17
<input type="checkbox"/>	L5	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (derivative or MPA)	580
<input type="checkbox"/>	L4	(glucagon-like or glucagon adj like or GLP\$2 or insulinotropic or glp-1) same (conjugat\$ or bind\$ or attach\$ or bond or bound) same ((blood or serum) adj protein or albumin)	36

END OF SEARCH HISTORY



Entrez PubMed Nucleotide Protein Genomes Structure OMIM PMC Journals Br
 Search PubMed for (GLP-1 or glucagon-like) AND derivat* Preview Go Clear
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Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

LinkOut

Cubby

Related Resources

Order Documents

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

Search	Most Recent Queries	Time	Result
#19	Search (GLP-1 or glucagon-like) AND derivat* Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:10:07	9
#18	Search (GLP-1 or glucagon-like) AND derivat* Field: Title, Limits: Publication Date to 1999/10/15	18:09:58	1
#11	Search #10 AND #6 Field: Title, Limits: Publication Date to 1999/10/15	18:08:03	122
#13	Search #10 AND D-Ala* Field: Title, Limits: Publication Date to 1999/10/15	18:06:13	0
#10	Search GLP-1 or glucagon-like Field: Title, Limits: Publication Date to 1999/10/15	18:04:40	755
#9	Search GLP-1 or glucagon-like Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:04:27	1256
#8	Search (GLP-1 or glucagon-like)[ti] AND (derivat* or albumin or protein) Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:04:11	0
#7	Search (GLP-1 or glucagon-like) AND (derivat* or albumin or protein) Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:04:01	242
#6	Search (GLP-1 or glucagon or insulinotropic) AND (derivat* or albumin or protein) Field: Title/Abstract, Limits: Publication Date to 1999/10/15	18:03:42	2621

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Aug 30 2004 06:52:01